

# milliTUBE 1 mL AFA Fiber (PN 520135)

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## Intended Use

The milliTUBE 1 mL AFA Fiber ([PN 520135](#)) is a singular vessel designed to hold a 1 mL sample volume that has been optimized for use with Covaris Adaptive Focused Acoustics® (AFA®). Each tube contains an AFA Fiber that improves reproducibility, promotes a thermally controlled process, reduces fragmentation times, and allows larger sample volumes to be processed.

The milliTUBEs have an easy-to-remove PTFE cap that screws onto the top of the tube. They are compatible with the M220, ME220, S220, E-Series, LE220-plus, LE220R-plus, and LE220Rsc Instruments, when used in combination with an Instrument-specific Rack or Holder. Refer to the Covaris-certified Consumable Guide ([covaris.com/wp-content/uploads/M020065.pdf](https://covaris.com/wp-content/uploads/M020065.pdf)) for further information.

This Consumable has been designed for use in the following applications: Chromatin Shearing, Tissue Extraction, and Cell Disruption.

For current protocols, quick guides, technical notes, or application notes: <https://www.covaris.com/protocols>.

For specific help with applications involving shearing, contact [applicationsupport@covaris.com](mailto:applicationsupport@covaris.com).

Recommended instructions are subject to change without notice.



## References and Supporting Documentation

### Protocol:

- truChIP Chromatin Shearing Kit ([PN 010179](#))
- truChIP Chromatin Shearing Tissue Kit ([PN 010385](#))
- Proteomics Protocols for Focused-Ultrasonicators (Cell Disruption)

## Operating Limits

<b>Volume Capacity*</b>	1000 µL (1 mL)
<b>Temperature (Water Bath)</b>	4 °C minimum; 25 °C maximum
<b>Storage</b>	Dry at ambient temperature (18-25°C) and out of direct sunlight.
<b>Water Level</b>	Please refer to Application-specific Protocols for each instrument.

\*Unless stated in a specific protocol, Covaris always recommends filling the milliTUBE with 1 mL.



**CAUTION:** All Covaris milliTUBEs must operate within given energy constraints. Operating outside of these limits or limits published in Covaris protocols may compromise the integrity of the milliTUBE.

## Relevant Accessories and Plate Definitions

Please refer to the Quick Guide for specific parameters for all applications.

### M220

<b>Peak Incident Power (W) &amp; Duty Factor (%)</b>	Please refer to Protocols for Cell Lysis, Tissue Extraction, or Chromatin Shearing for specific combinations.
<b>Holder + Insert</b>	M220 Holder XTU ( <a href="#">PN 500414</a> ) + M220 Holder XTU Insert milliTUBE 1mL ( <a href="#">PN 500422</a> )

### ME220

<b>Peak Incident Power (W) &amp; Duty Factor (%)</b>	Please refer to Protocols for Cell Lysis, Tissue Extraction, or Chromatin Shearing for specific combinations.
<b>Waveguide</b>	ME220 Waveguide 4-place ( <a href="#">PN 500534</a> )
<b>Rack</b>	ME220 Rack – 4-place milliTUBE 1mL ( <a href="#">PN 500520</a> )
<b>Plate Definition</b>	“4 milliTUBE-1 AFA Fiber Screw-Cap PN 520135.2.rck”

### S220

<b>Peak Incident Power (W) &amp; Duty Factor (%)</b>	Please refer to Protocols for Cell Lysis, Tissue Extraction, or Chromatin Shearing for specific combinations.
<b>Holder</b>	Holder milliTUBE 1 mL ( <a href="#">PN 500371</a> )

## E220

<b>Peak Incident Power* (W) &amp; Duty Factor (%)</b>	Please refer to Protocols for Cell Lysis, Tissue Extraction, or Chromatin Shearing for specific combinations.
<b>Rack</b>	Rack 24-place milliTUBE 1 mL ( <a href="#">PN 500368</a> )
<b>Plate Definition</b>	"500368 24 milliTUBE 1ml + 0.5mm offset"
<b>Intensifier</b>	No

\*This instrument has a Peak Incident Power limit of 150 Watts. If your application exceeds 150 Watts, please contact [applicationsupport@covaris.com](mailto:applicationsupport@covaris.com).

## E220evolution

<b>Peak Incident Power* (W) &amp; Duty Factor (%)</b>	Please refer to Protocols for Cell Lysis, Tissue Extraction, or Chromatin Shearing for specific combinations.
<b>Rack</b>	Rack E220e 4-place milliTUBE 1 mL ( <a href="#">PN 500431</a> )
<b>Plate Definition</b>	"500431 E220e 4 milliTUBE 1ml -9.02mm offset"
<b>Intensifier</b>	No

\*This instrument has a Peak Incident Power limit of 150 Watts. If your application exceeds 150 Watts, please contact [applicationsupport@covaris.com](mailto:applicationsupport@covaris.com).

## LE220-plus and LE220R-plus

<b>Peak Incident Power (W) &amp; Duty Factor (%)</b>	Please refer to Protocols for Cell Lysis, Tissue Extraction, or Chromatin Shearing for specific combinations.
<b>Rack</b>	Rack 24-place milliTUBE 1 mL ( <a href="#">PN 500368</a> )
<b>Plate Definition</b>	"LE220plus_500368 Rack 24 Place milliTUBE 1 ml +0.5mm offset"

## LE220Rsc

<b>Peak Incident Power (W) &amp; Duty Factor (%)</b>	Please refer to Protocols for Cell Lysis, Tissue Extraction, or Chromatin Shearing for specific combinations.
<b>Rack</b>	Rack 24-place milliTUBE 1 mL ( <a href="#">PN 500368</a> )
<b>Plate Definition</b>	"LE220PRSC_500368 Rack 24 Place milliTUBE 1 ml +0.5mm offset"

**NOTE:** If the plate definition is not present on the system, contact Covaris Technical Support ([Techsupport@covaris.com](mailto:Techsupport@covaris.com)) with the system serial number.

## Instructions for Use

1. The milliTUBE 1 mL with AFA Fiber has a screw cap for sample loading. Remove the screw-cap, making sure to keep the tube upright to keep the AFA Fiber in the milliTUBE, to add sample to the glass tube.
2. Ensure the screw-cap is in the locked position.
3. Load the milliTUBE 1 mL into the appropriate Rack/Holder + Insert/Waveguide + Rack and process the sample using the parameters outlined in the application specific protocol.
4. Once finished, remove the sample from the milliTUBE. Do not store the processed sample in the milliTUBE 1 mL with AFA Fiber.

## Ordering Information

Part Name	Part Number	Part Description
milliTUBE 1 mL AFA Fiber	<a href="#">520135</a>	12x12 mm TUBE with AFA Fiber & PTFE seal cap, 24 count
milliTUBE 1 mL AFA Fiber - Case	<a href="#">520130</a>	12x12 mm TUBE with AFA Fiber & PTFE seal cap, 100 count
milliTUBE 1 mL AFA Fiber - Bulk	Please contact Covaris for ordering information	12x12 mm TUBE with AFA Fiber & PTFE seal cap, 1000 count
milliTUBE Prep Station 4 Place	<a href="#">500338</a>	Prep Station for 4 12x12 mm TUBE

## Support and Technical Assistance

Tech Support: Ongoing assistance with the operation or application of the equipment and/or troubleshooting is provided via:

- **Telephone:**
  - US & APAC: +1 781.932.3959, during the hours of 8:30 a.m. to 5:00 p.m. (EST), Monday through Friday
  - EU: +44 (0)845 872 0100, during the hours of 9:00 a.m. to 5:00 p.m. (GMT), Monday through Friday
- **E-mail:**
  - Service and Instrumentation: [techsupport@covaris.com](mailto:techsupport@covaris.com)
  - Solutions: [applicationsupport@covaris.com](mailto:applicationsupport@covaris.com)
  - US Customer Service: [customerservice@covaris.com](mailto:customerservice@covaris.com)
  - EU/UK Customer Service: [emeacustomerservice@covaris.com](mailto:emeacustomerservice@covaris.com)
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**Information subject to change without notice. For use research only. Not for use in diagnostic procedures.**

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